

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

Patent No.:	US 7,017,640 B2	)	<b><i>Confirmation No. 4034</i></b>
Issued:	March 28, 2006	)	
Patentees:	Steven B. WINTER et al.	)	
For:	METHOD AND APPARATUS FOR MANUFACTURE OF SWATCH-BEARING SHEETS	)	
<hr/>			This Request For Certificate Of Correction Of Patent was electronically filed on June 18, 2007 using the USPTO's EFS-Web.
Application No.:	10/071,678	)	
Filed:	February 7, 2002	)	
<hr/>			
Attorney Docket:	303/72967	)	
Customer No.:	22242	)	

Commissioner for Patents  
P. O. Box 1450  
Alexandria, Virginia 22313-1450

ATTENTION: Certificate of Corrections Branch

**REQUEST FOR CERTIFICATE OF CORRECTION OF PATENT  
FOR PTO MISTAKE (37 C.F.R. § 1.322)**

Sir:

In accordance with 37 C.F.R. § 1.322, the above-specified Patentees, through their attorneys, respectfully request that a Certificate of Correction be issued for the above-captioned patent to correct the following errors.

The exact page and line number where the errors occurred in the application file are:

Patent US 7,017,640 B2  
Issued March 28, 2006  
REQUEST FOR CERTIFICATE OF CORRECTION OF PATENT dated June 18, 2007

ON THE TITLE PAGE:

(76) Inventors, line 1, delete "2139 Grange Ave.," and insert --2801 Ridge,-- therefor (from Declaration and Power of Attorney, page 3, Post Office Address for Inventor Steven B. Winter).

Foreign Patent Documents, first entry (FR 2717165 A1), after "9/1995" insert --B65H 39/14-- (PTO-892 Notice of References Cited by the Examiner, Office Action dated June 28, 2004).

IN THE CLAIMS:

Column 28, line 18, delete "far" and insert --for-- therefor (from Amendment dated July 14, 2005, page 2, claim 1, line 1).

Column 29, line 54, after "pairs" insert --of-- (from Amendment dated July 14, 2005, page 5, claim 18, line 9).

Column 30, line 37, after "surface" delete "plates" (from Amendment dated July 14, 2005, page 6, claim 26, line 2).

REMARKS

The above-requested changes result from errors which occurred during printing of Patent US 7,017,640 B2 and which are attributable to the United States Patent and Trademark Office ("USPTO"). It is believed that issuance of a Certificate of Correction is appropriate, and issuance of such Certificate is respectfully requested.

A Certificate of Correction form, PTO/SB/44 (also referred to as PTO 1050), incorporating the requested changes is enclosed herewith.

In accordance with procedures set forth in the notice entitled "Expedited Issuance of Certificates of Correction When the Error is Attributable to the United States Patent and Trademark Office," Patentees submit herewith copies of the executed Declaration and Power

Patent US 7,017,640 B2

Issued March 28, 2006

REQUEST FOR CERTIFICATE OF CORRECTION OF PATENT dated June 18, 2007

of Attorney, Form PTO-892 Notice of References Cited by the Examiner in the Office Action mailed June 28, 2004, and the Amendment dated July 14, 2005 as supporting documentation so that this request can be processed without the patent file.

Please send the Certificate to:

James P. Krueger, Esq.  
FITCH, EVEN, TABIN & FLANNERY  
120 South LaSalle Street, Suite 1600  
Chicago, Illinois 60603-3406

The Commissioner is hereby authorized to charge any additional fees which may be required in respect to this communication to Deposit Account No. 06-1135.

Respectfully submitted,

FITCH, EVEN, TABIN & FLANNERY

Dated: June 18, 2007



James P. Krueger  
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485185

**DECLARATION  
FOR UTILITY OR DESIGN  
PATENT APPLICATION**

	) Attorney Docket No.:	72967
	)	
	) First Named Inventor:	Steven B. Winter
	)	
	)	
	) Application Number:	N/A
<input type="checkbox"/> Declaration Submitted With Initial Filing	) Filing Date:	Herewith
	)	
<input checked="" type="checkbox"/> Declaration Submitted After Initial Filing	) Group Art Unit:	N/A
	)	
	) Examiner Name:	N/A

As a below named inventor, I hereby declare that:

My residence, post office address and citizenship are as stated below next to my name.

I believe I am the original, first and sole inventor (if only one name is listed below) or an original, first and joint inventor (if plural names are listed below) of the subject matter which is claimed and for which a patent is sought on the invention entitled:

METHOD AND APPARATUS FOR MANUFACTURE OF SWATCH-BEARING SHEETS

*(Title of Invention)*

the specification of which:

☐ is attached hereto, or

☒ was filed by an authorized person on my behalf on February 7, 2002 as United States Application Number 10/071,678 or PCT International Application Number \_\_\_\_\_, and was amended on \_\_\_\_\_ (if applicable).

I hereby state that I have reviewed and understand the contents of the above-identified specification, including the claims, as amended by any amendment specifically referred to above.

I acknowledge the duty to disclose information which is material to patentability as defined in Title 37, Code of Federal Regulations, §1.56.

I hereby claim foreign priority benefits under Title 35, United States Code, §119(a)-(d) or §365(b) of any foreign application(s) for patent or inventor's certificate, or §365(a) of any PCT international application which designated at least one country other than the United States of America, listed below, and I have also identified below, by checking the box, any foreign application for patent or inventor's certificate, or any PCT international application, on this invention filed by me or my legal representatives or assigns and having a filing date before that of the application on which priority is claimed:

<u>Prior Foreign Application Number(s)</u>	<u>Country</u>	<u>Foreign Filing Date</u>	<u>Priority Not Claimed</u>
			<input type="checkbox"/>
			<input type="checkbox"/>
			<input type="checkbox"/>

☐ Additional foreign application numbers are listed on a supplemental priority data sheet attached hereto.

I hereby claim the benefit under Title 35, United States Code, § 119(e) of any United States provisional application(s) listed below:

<u>Provisional Application Number(s)</u>	<u>Provisional Application Filing Date</u>
60/267,826	February 9, 2001

☐ Additional provisional application numbers are listed on a supplemental priority data sheet attached hereto.

I hereby claim the benefit under Title 35, United States Code, § 120, of any prior United States application(s), or under § 365(c) of any PCT international application(s) designating the United States of America, listed below and, insofar as the subject matter of each of the claims of this application is not disclosed in the prior United States or PCT international application(s) in the manner provided by the first paragraph of Title 35, United States Code, § 112, I acknowledge the duty to disclose all information known by me to be material to patentability as defined in Title 37, Code of Federal Regulations, § 1.56, which became available between the filing date of the prior application(s) and the national or PCT international filing date of this application:

<u>Prior U.S. Application Number</u>	<u>Prior PCT International Application Number</u>	<u>Filing Date of U.S. or PCT International Application</u>	<u>Patent Number (if applicable)</u>

☐ Additional U.S. or PCT international application numbers are listed on a supplemental priority data sheet attached hereto.

As a named inventor, I hereby appoint the practitioners associated with Customer Number 22242, with full power of substitution and revocation, to prosecute this application and to transact all business in the United States Patent and Trademark Office connected therewith, and request that all correspondence and telephone calls in respect to this

application be directed to FITCH, EVEN, TABIN & FLANNERY, Suite 1600, 120 South LaSalle Street, Chicago, Illinois 60603-3406, Telephone No. (312) 577-7000, Facsimile No. (312) 577-7007, CUSTOMER NUMBER 22242.



I hereby declare that all statements made herein of my own knowledge are true, and that all statements made herein on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code, and that such willful false statements may jeopardize the validity or enforceability of the application or any patent issued thereon.

Full name of sole or one joint inventor:

Steven B. Winter

(Given names first, with Family name last)

Inventor's signature:

*Steven B. Winter*

Date:

3-26-02

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Citizenship:

USA

Full name of one joint inventor:

Stanley I. Lerner

(Given names first, with Family name last)

Inventor's signature:

*Stanley I. Lerner*

Date:

4/3/02

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(City and State for U.S. Residents; City and Country for others)

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Glencoe, IL 60022

Citizenship:

USA

**Notice of References Cited**

Application/Control No.

10/071,678

Applicant(s)/Patent Under  
Reexamination  
WINTER ET AL.

Examiner

John L. Goff

Art Unit

1733

Page 1 of 1

**U.S. PATENT DOCUMENTS**

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Name	Classification
	A	US-4,799,664	01-1989	Burger, Karl H.	271/277
	B	US-5,169,285	12-1992	Muller, Hans	414/797.8
	C	US-5,007,629	04-1991	Eberle et al.	271/277
	D	US-			
	E	US-			
	F	US-			
	G	US-			
	H	US-			
	I	US-			
	J	US-			
	K	US-			
	L	US-			
	M	US-			

**FOREIGN PATENT DOCUMENTS**

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Country	Name	Classification
	N	FR 2717165 A1	09-1995	France	ANDRE et al.	B65H 39/14
	O					
	P					
	Q					
	R					
	S					
	T					

**NON-PATENT DOCUMENTS**

*		Include as applicable: Author, Title Date, Publisher, Edition or Volume, Pertinent Pages)
	U	English abstract of FR 2717165
	V	
	W	
	X	

\*A copy of this reference is not being furnished with this Office action. (See MPEP § 707.05(a).)  
Dates in MM-YYYY format are publication dates. Classifications may be US or foreign.

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

Appln No.: 10/071,678

Confirmation No. 4034

Filed: February 7, 2002

First Named

Inventor: Steven B. Winter et al.

Title: Method and Apparatus for  
Manufacture of Swatch-Bearing  
Sheets

Art Unit: 1733

Examiner: Goff II, John L.

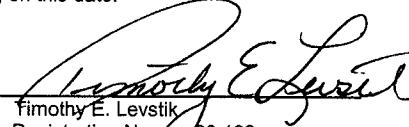
Attorney Docket No.: 72967

Customer No.: 22242

**CERTIFICATE OF FACSIMILE**

I hereby certify that this paper is being faxed to  
Examiner John L. Goff II, Group Art Unit 1733 at  
571.273.1216 at the Commissioner for Patents,  
Alexandria, VA, on this date.

3/14/05  
Date

  
Timothy E. Levstik  
Registration No. 30,192  
Attorney for Applicant(s)

**AMENDMENT**

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Dear Sir:

In response to the Office action of April 12, 2005, please amend the above-identified application as follows.

**Amendments to the Claims** are reflected in the listing of claims which begins on page 2 of this paper.

**Remarks** begin on page 9 of this paper.



**Amendments to the Claims:**

This listing of claims will replace all prior versions, and listings, of claims in the application.

**Listing of Claims:**

Claim 1 (Currently Amended): An apparatus for adhering paint chips ~~in rows on~~ sheets at predetermined locations thereon, the apparatus comprising:

a plurality of stations including at least one ~~an~~ adhesive applying station upstream from swatch applying stations that deposit paint chips onto adhesive transferred to the sheets at the adhesive station;

a conveyor for advancing the sheets ~~sheet~~ from upstream to downstream through the plurality of stations;

a sheet feeder upstream of the conveyor for sequentially supplying the sheets to the conveyor;

~~a~~ at least two gripping ~~mechanism~~ mechanisms connected to the conveyor and having an open state facing upstream for receiving sheets and a closed state for holding sheets received therein, the gripping mechanisms laterally disposed from each other along an axis perpendicular to the direction of the downstream advancement of the sheets;

an elongated support surface extending from the sheet feeder downstream; and

a drive system for the conveyor and sheet feeder that coordinates timing of the supply of the sheets by the sheet feeder to the gripping ~~mechanism~~ mechanisms so that the gripping mechanisms shift ~~mechanism shifts~~ between the open and closed states ~~thereof~~ as ~~the~~ an individual sheet is received therein with the gripping ~~mechanism~~ mechanisms closing onto a downstream ~~leading~~ edge of the received sheet ~~to for~~ substantially maintain the leading edge of the sheet in a generally constant orientation reducing sheet float when the individual sheet is pulled generally in a plane over the support surface from upstream to downstream without opening the mechanisms as the individual sheet is pulled ~~for pulling the sheet downstream~~ through the stations ~~without interfering with operations of the adhesive applying station and swatch applying stations.~~

Claim 2 (Currently Amended): The apparatus of claim 1 wherein the gripping ~~mechanisms include~~ mechanism includes pivotal members having ends that are pivoted away from each other in the open state to face upstream toward the sheet feeder, the ends being pivoted toward each other in the closed state to clamp onto the individual sheet for pulling the individual sheet downstream ~~on the conveyor~~.

Claim 3 (Currently Amended): The apparatus of claim ~~2~~ 4 wherein the conveyor is an endless conveyor for moving the sheets ~~having a downstream travel path between~~ a sheet supply end and a sheet discharge end with the stations therebetween, and opening mechanisms at ~~predetermined~~ positions at the sheet supply and discharge ends of the endless conveyor ~~which~~ cooperate with the gripping mechanisms ~~mechanism~~ to shift the gripping mechanisms ~~mechanism~~ to the open state for receiving the individual sheet ~~sheets~~ at the supply end and for releasing the sheets at the discharge end.

Claim 4 (Currently Amended): The apparatus of claim ~~3~~ 4 wherein the gripping mechanisms ~~mechanism includes~~ include pivotal members, and ~~a~~ at least one cam mechanism at a ~~predetermined~~ position along the conveyor adjacent the sheet feeder for pivoting the gripping mechanisms ~~mechanism members~~ to the open state as ~~an incidence of the travel of the gripping mechanisms travel~~ mechanism attached to the conveyor past the cam mechanism.

Claim 5 (Currently Amended): The apparatus of claim ~~4~~ 4 wherein the gripping mechanisms include ~~mechanism includes~~ a biasing mechanism for urging the pivotal members to the closed state with a ~~predetermined~~ bias force to securely hold the individual sheets received therein with the cam mechanism being operable to shift the pivotal members to the open state against the ~~predetermined~~ bias force.

Claim 6 (Currently Amended): The apparatus of claim ~~5~~ 4 wherein the conveyor further includes ~~an upstream end adjacent the sheet feeder and~~ lateral guides downstream of the sheet feeder at the upstream end of the conveyor, the lateral guides

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~~that are~~ adjustable to align the individual sheets received from the feeder on the conveyor for downstream travel of the individual sheets through the stations with the gripping ~~mechanisms~~ mechanism operable between the guides to hold the individual sheets and pull the aligned sheets through the stations ~~without need for additional guides associated with the stations.~~

Claim 7 (Currently Amended): An apparatus for adhering swatches ~~in rows on~~ individual sheets at predetermined locations thereon, the apparatus including:

an at least one adhesive applying station for depositing adhesive on the individual sheets at predetermined locations on the sheet;

one or more swatch applying stations for placing swatches on the adhesive at the predetermined locations on the sheet;

an elongated support surface extending from upstream to downstream;

at least two sets of gripping jaws, each set having an upper and lower a single set of sheet engaging gripping jaw members associated with a sheet for advancing pulling a downstream leading edge of the sheet through and under the adhesive applying station and the swatch applying stations, each set of gripping jaws being disposed laterally from each other along an axis perpendicular to the elongated support surface, the gripping jaws shifting between the open and closed states as the individual sheet is received therein with the gripping jaws closing onto the downstream edge of the received sheet for substantially reducing sheet float when the individual sheet is pulled generally in a plane over the support surface from upstream to downstream without opening the jaws as the individual sheet is pulled through and under the adhesive applying station and the swatch applying stations ~~the sheet engaging members having low profiles so as to fit between closely spaced operating members in operating areas of the adhesive applying station and the swatch applying stations.~~

Claim 8 to Claim 17 (Canceled).

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Claim 18 (Currently Amended): An apparatus for moving a sheet through machinery for applying swatches to sheets in a machine feed direction, the apparatus comprising:

a feeding station for separating where a an individual sheet is separated from a plurality of sheets in a stack and feeding the separated individual sheet;

an endless flexible drive a chain;

an elongated sheet support surface extending from the upstream to the downstream for support of the sheet while traveling downstream;

at least two pairs of gripping jaws affixed to the endless flexible drive, the gripping jaws facing upstream a gripper mechanism disposed on the chain adapted for gripping an upstream edge of the sheet;

an adhesive applying station for applying glue to the sheet;

one or more swatch applying stations each having one or more operating cylinders having an axis of rotation perpendicular to the machine feed direction for applying one or more swatches to the sheet; and

a receiving station for receiving the sheet after the sheet has been through the adhesive applying station and the swatch applying station; ,

wherein each of the at least two pairs of the gripping jaws pivoting on a pivot axis perpendicular to the movement of the sheet moving downstream the jaws pivoting to gripper mechanism has an open position and a closed position ,

each pair of the gripping jaws being disposed laterally from each other along an axis perpendicular to the elongated sheet support surface; and

wherein the gripping jaws gripper mechanism in the closed position for pulling pulls the sheet by a leading the downstream edge of the sheet from the feeding station downstream through the adhesive applying station and through the swatch applying station to the receiving station, the gripping jaws gripper mechanism passing beneath at least one of the one or more operating cylinders of at least one of the one or more swatch applying stations.

Claim 19 (Currently Amended): The apparatus Apparatus in accordance with claim 18 wherein the gripping jaws are gripper mechanism includes an upper jaw and a lower jaw pivotally hinged together by a pivot pin which has it longitudinal axis

perpendicular to the downstream movement of the sheet..

Claim 20 to Claim 21 (Cancel)

Claim 22 (Currently Amended): ~~The apparatus~~ Apparatus in accordance with claim 18 wherein the endless flexible drive is a chain and the apparatus further includes ~~revolves around~~ a forward gear with a cam ~~thereby by~~ downstream and adjacent to the feeding station and a rearward gear with a cam upstream and adjacent to ~~thereby by~~ the receiving station, the chain revolving the forward and rearward gears, the cams operably connected to the jaws to close the jaws at the forward gear and open the jaws and the rearward gear.

Claim 23 (Currently Amended): ~~The apparatus~~ Apparatus in accordance with claim 22 wherein each pair of the gripping jaws include a lower jaw and upper jaw, the lower jaw pivots about the pivot axis relative to the upper jaw to bring the gripper mechanism gripping jaws from a closed position to the open position during contact with the cam by the forward gear or the rearward gear.

Claim 24 (Currently Amended): ~~The apparatus~~ Apparatus in accordance with claim ~~23~~ 24 wherein each pair of the gripping jaws are gripper mechanism is biased towards the closed position by a spring, wherein the a gripping arm extending from of the upper jaw contacts the a gripping tab extending from of the lower jaw when the gripping jaws are gripper mechanism is in the closed position.

Claim 25 (Cancel)

Claim 26 (Currently Amended): ~~The apparatus~~ Apparatus in accordance with claim ~~18~~ 25 wherein the elongated support surface plates includes are arranged with slots in which for the gripping jaws travel downstream gripper mechanism to protrude through.

Claim 27 to Claim 32 (Cancel)

Claim 33 (New): The apparatus in accordance with claim 7 wherein the gripping jaws are hinged together by a pivot pin which has its longitudinal axis perpendicular to the downstream movement of the sheet.

Claim 34 (New): The apparatus in accordance with claim 33 wherein the apparatus further includes an endless flexible drive for moving the gripping jaws downstream, a feeding station for separating an individual sheet from a plurality of sheets in a stack and feeding the separated individual sheet, a receiving station for receiving the sheet after the sheet has been through the adhesive applying station and swatch applying station, a forward gear with a cam downstream and adjacent to the feeding station and a rearward gear with a cam upstream and adjacent to the receiving station, the flexible drive revolving the forward and rearward gears, the cams operably connected to the jaws to close the jaws at the forward gear and open the jaws and the rearward gear.

Claim 35 (New): The apparatus in accordance with claim 34 wherein the lower gripping jaw pivots about the pivot axis relative to the upper jaw to bring the gripping jaws from a closed position to the open position during contact with the cam by the forward gear or the rearward gear.

Claim 36 (New): The apparatus in accordance with claim 33 wherein the gripping jaws are biased towards the closed position by a spring, wherein a gripping arm extending from the upper jaw contacts a gripping tab extending from the lower jaw when the gripping jaws are in the closed position.

Claim 37 (New): The apparatus in accordance with claim 35 wherein the gripping jaws are biased towards the closed position by a spring, wherein a gripping arm extending from the upper jaw contacts a gripping tab extending from the lower jaw when the gripping jaws are in the closed position.

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Claim 38 (New): The apparatus in accordance with claim 7 wherein the elongated support surface supports the sheet as the gripping jaws pull the sheet downstream, the elongated support surface including slots in which the gripping jaws travel downstream.

Claim 39 (New): The apparatus in accordance with claim 33 wherein the elongated support surface supports the sheet as the gripping jaws pull the sheet downstream, the elongated support surface including slots in which the gripping jaws travel downstream.

### **REMARKS**

The Applicants and their attorney thank Examiner Goff for the interview of June 22, 2005. As noted in the Interview Summary:

Examiner the and applicants' representative discussed proposed amendments to the claims regarding amending the claims to require for example 'the gripping jaws being disposed laterally from each other along an axis perpendicular to the elongated support surface'. The examiner agreed an amendment of this type to require (at least) two gripping mechanisms disposed laterally from each other perpendicular to the direction of travel of the sheets would appear to overcome the prior art of record.

Applicants have amended the claims in accordance with the substance of the interview. Apparatus claims 1-7, 18-19, 20-24, 26 and 33-39 are presently pending. Claims 1, 7 and 18 are independent claims. Dependent claims 33-39 all ultimately depend from claim 7 and are new. In view of the fact that all of the independent claims at least require that the gripping mechanisms are laterally disposed from each other, the independent claims overcome the art of record and should be passed to issue.

### **The Rejections**

The Examiner rejected claims 1-5 and 7 under section 102(b) based upon Andre and under section 103 based upon Andre in view of Burger, Muller or Eberle.

The Examiner rejected claim 6 under section 103 based upon Andre and in view of Burger, Muller or Eberle.

The Examiner rejected claims 18-23, 24, 25 and 26 under section 103 based upon Andre and in view of Burger, Muller or Eberle and further in view of USPN 4,061,521 to Lerner et al.

### **The Operation Of And The Problems Solved By Applicant's Apparatus**

This invention is directed to the application of color swatches to base sheets where the sheets are used for the illustration of color. The product of the apparatus are color cards which the consumer often sees in the selection of paint color.

Current machinery to make these products is high speed. Feed fingers push base sheets through stations where adhesive and swatches are applied to the base sheets. As noted in the specification, however, the prior art machinery has had problems with misaligned sheet and sheets which have their leading downstream edge float or lift as the



sheet travels downstream through various adhesive and swatch applying stations. The specification states in part:

The feed fingers that push the sheets along the travel surfaces are attached to conveyors in the form of drive chains. Separate drive chain conveyors extend between each of the operating stations so that several sets of feed fingers will have pushed the sheets during their travel from the infeed to the outfeed of the sheets from the machine. The use of multiple sets of conveyers and multiple sets of feed fingers to push each sheet to and from each operating station requires precise coordination of the timing of the positions of each set of feed fingers on each conveyor to push the sheet through the operating stations, particularly where operating speed is maximized. Page 2, lines 1-13 of the specification.

\* \* \* \*

The feed fingers do not positively grip the sheets. As there is no positive gripping, the feed fingers extend a relatively high distance above the travel surfaces to ensure that they contact the rearward edge of the sheets as occasionally the sheets will not be lying flat on the travel surfaces such as if the rearward edge of the sheet curls.

Because of the height that the feed fingers extend above the travel surfaces and the lack of positive gripping of the sheets, the feed fingers are not able to push the sheets through the stations. More specifically, upper and lower rollers cooperate to form nips of the operating stations into which the sheets are fed and from which they are discharged. In the nips, adhesive and swatches are applied to the sheets. The height of the feed fingers does not allow for their passage through the nip areas between the closely spaced rollers of the operating stations.

Accordingly, instead of using a single set of feed fingers to push the sheets through each operating station, a separate set of feed fingers pushes each of the sheets to each station. The nip formed by the rollers in each station draw the sheets therethrough and discharges them downstream to the next conveyor at which point another set of feed fingers then pushes the sheets to the next station. The timing of the multiple sets of feed fingers must be coordinated so that as a sheet leaves a station a new set of feed fingers are positioned to push the sheet to the next station. If the timing is not correctly coordinated, misfeeds may occur. Misfeeds are undesirable because the swatch applying machinery must be stopped while the misfed sheet or sheets are removed and the machinery reset for continued operation. Page 2, line 23 to page 3, line 20 of the specification.

Sheet float causes misalignments and limits the speed of a machine. As noted in the specification:

As sheets are fed through the swatch applying machinery at higher speeds, the sheets have a tendency to float above the travel surfaces. At higher speeds, the front or leading edge of the sheet tends to lift up, allowing air to flow underneath the sheet. The result is a sheet that is partially floating on air. The faster the swatch applying machinery is run, i.e., the more sheets per hour fed through the machine, the greater the tendency for the sheets to float. The problem of sheet float is particularly acute when lighter sheet stocks are used. The use of lighter sheet stock

tends to increase the tendency for the sheets to lift up from the travel surfaces because the sheets do not have sufficient weight to maintain themselves in a planar alignment and against the travel surfaces. When sheets float, there are increased occurrences of misfeeds and misprints. Floating sheets tend to deviate from their preferred alignment, even with the assistance of the side sheet guides associated with the travel surfaces. The corners of floating sheets tend to catch on various parts of the swatch applying machinery, causing the sheets to become misaligned. Page 3, line 35 to page 4, line 21 of the specification.

### **The References**

#### **1. Andre**

As discussed at the interview, Andre discloses an apparatus for attaching painted paper strips 4, 5 and 6 to a support sheet 3. Andre's grippers are not laterally disposed from each other along an axis perpendicular to the direction of downstream advancement of the sheet. Andre's sheets are gripped by clamps 8b on a lateral side of the sheet, *i.e.*, an edge which is not downstream, and are moved laterally onto a transfer table 7 via a conveyor 8. Andre's grippers are on the side of the sheets and while they move the sheets downstream, they do not move under any work stations and do not move under any work station. Andre can have a sheet float problem at high speeds and may not be able to substantially maintain the leading edge of the sheet in a generally constant orientation due to air flow beneath the sheet and a lack of a grip on the leading edge of the sheet. Hence the problem of float and misalignment are not even recognized, let alone solved with grippers gripping a downstream edge of a sheet to keep the sheet from floating and being misaligned.

In contrast, each of the claimed apparatus recite mechanisms or members for pulling their sheets by a downstream edge of the sheets to avoid misalignment and float. Moreover, in an important aspect multiple grippers releasing and grabbing sheets after each station also is avoided because the grippers travel under and through a work station without the problem of releasing and grabbing the sheet multiple times.

#### **2. Burger, Muller And Eberle**

Burger, Muller or Eberle disclose pulling sheets through stations. Burger, Muller and Eberle are not properly combinable with Andre. Moreover, no motivation is provided for their proposed combination.

Burger merely discloses one set of gripping jaws that do not go under or through a work station where items are applied to a sheet. With one set of jaws Burger does not solve

a float problem. Burger merely has a gripper mechanism for transferring sheets between stations, as opposed to through stations as in the presently claimed apparatus. For example, Burger discloses the gripping of a sheet after emerging from a printing station. (Col. 3, ll. 52-59.) Burger further describes a use of its gripping mechanisms "in the form of an inverter apparatus 50 of a sheet feeder and inverter apparatus between two printing machines 3, 5..." (Col. 4, ll. 10-12.) Burger uses his one set of gripping jaws to invert sheets, and in doing so grips the sheets in a rotary motion and does not move the sheets in a plane between work stations while continuously gripping the downstream edge of the sheet.

Muller's grippers would be totally useless for transporting sheets for the application of swatches. Muller grippers hold sheets perpendicular from the plane in which the chain which holds the grippers travels. Hence the paper sheets are held in a configuration which where the surface of the sheet would not be disposed in a plane where it could receive adhesive or the application of swatches. Float is not a problem and is something that would have to be addressed or solved. The object of the Muller apparatus is to simply transport sheets between a source of stacked sheets and a receiving station for individual sheets. (See col. 1, ll. 55-59.)

Eberle's grippers are irrelevant to solving the problems addressed by applicant's invention for the same reasons as Muller's grippers are irrelevant and useless for transporting sheets for the application of swatches. Eberle's grippers are moved on a chain drive where the edge of the sheets are gripped in such a way that the planes formed by the sheets is perpendicular to the chain. Eberle discloses that printed products 12, 14 are delivered to the gripper elements 18 (col. 5, ll. 52-54), as opposed to the gripper elements directing the products through printing stations. Nowhere do Muller or Eberle disclose that their apparatus can be used to pull sheets through various stations which are to operate on the sheet by placing something thereon.

#### **The References Are Not Combinable**

Andre grips sheets on a lateral edge and moves them downstream where color strips are applied to the surface of the sheets with vacuum suckers. The grippers move the sheet in a plane of the transfer table 7 which supports the sheet during mounting operations. The grippers of Muller and Eberle do not combine with Andre, indeed, they would be useless to Andre because Muller's and Eberle's gripping jaws would hold the sheets perpendicular to

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Reply to Office action of April 12, 2005

the plane of the transfer table and make mounting operations impossible.

Burger's single set of gripping jaws are opened and closed at the same roller because the sheet has been inverted and brought back to its starting point at roller 52. The entire point of Burger is to invert a sheet and deposit it onto another conveyor, not to transport sheets through work stations. Andre would not have looked to Burger's rotating gripper to transport the sheets downstream under the depositing vacuum suckers.

**The Claims Are Not Anticipated Or Obvious**

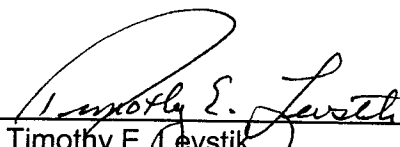
No reference either alone or in combination suggests an apparatus which has gripping jaws which are laterally disposed from each other in a direction which is perpendicular to the downstream advancement of the sheet and which open facing upstream for pulling a downstream edge of a sheet downstream through workstations. No reference either alone or in combination suggests an apparatus which has gripping jaws which open facing upstream and which pull a flat sheet from a downstream edge in the same plane formed by the flat sheet over a flat support surface and under work stations in a downstream direction.

For the reasons set forth above, the Applicants respectfully requests reconsideration and allowance of the pending claims. Please charge any fees required by this amendment to Deposit Account No. 06-1135.

Respectfully submitted,

FITCH, EVEN, TABIN & FLANNERY

By:

  
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## UNITED STATES PATENT AND TRADEMARK OFFICE CERTIFICATE OF CORRECTION

Page 1 of 1

PATENT NO. : 7,017,640 B2

APPLICATION NO.: 10/071,678

ISSUE DATE : March 28, 2006

INVENTOR(S) : Steven B. Winter et al.

It is certified that an error appears or errors appear in the above-identified patent and that said Letters Patent is hereby corrected as shown below:

### ON THE TITLE PAGE:

(76) Inventors, line 1, delete "2139 Grange Ave.," and insert --2801 Ridge,-- therefor.  
Foreign Patent Documents, first entry (FR 2717165 A1), after "9/1995" insert --B65H 39/14-- .

### IN THE CLAIMS:

Column 28, line 18, delete "far" and insert --for-- therefor.  
Column 29, line 54, after "pairs" insert --of--.  
Column 30, line 37, after "surface" delete "plates".

### MAILING ADDRESS OF SENDER (Please do not use customer number below):

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This collection of information is required by 37 CFR 1.322, 1.323, and 1.324. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 1.0 hour to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. **SEND TO: Attention Certificate of Corrections Branch, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.**

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